



Alpha Magnetic
Spectrometer NASA / DOE

Open Paper Management Tool Open Items Report



National Aeronautics and
Space Administration

Thursday, May 15, 2008

Open Action Items Report

Open Item Number: 05-043

RID Open Date: 9/14/2005

Title: Helium Venting Hazard Analysis

Initiator(s):

Description: Provide hazard analysis for venting of helium from the main tank.

Action Item Information

Actionee(s): Gaetan Piret/ESTEC

Action Due Date: 5/1/2007

Action: Upon delivery of hazard analysis described in 05-042, evaluate potential hazards to EMI and TV test chambers.

Action Status: 5/15/2008 - Draft white paper released for internal review. Final version to be released shortly.
3/14/2008 - Some comments provided by ESTEC - additional analysis to address their concerns is in work.
2/20/2008 - Initial analysis presented to ESTEC on 29 Jan. More detailed analysis for the two test chambers and the clean room is the process of being written up.
11/20/06 - Date rolled to May 1st to roll with 05-042.
8/14/06 - Date rolled to October 1st.
4/10/06 - Due date changed to 6/1/06 allow time after completion of 05-042.
11/12/2005 - Date changed to 4/1/2006 to match item 05-042.

Open Action Items Report

Open Item Number: 05-074

RID Open Date: 10/28/2005

Title: CGSE Support at Pad

Initiator(s): Trent Martin

Description: *It is not clear how the cryogenic GSE, particularly the piping, will be supported at the pad.*

Action Item Information

Actionee(s): Robert Becker/MIT, Alexander Gretchko/MIT

Action Due Date: 10/25/2007

Action: *Provide details on how the GSE will be supported at the pad.*

Action Status: 12/16/2007 - Pump layout comments received from Pete Reutt. New proposals under work in Shanghai to accommodate suggestions.

10/24/2007 - New layouts proposed at GOWG - New drawings/layouts in work in Shanghai.

6/4/2007 - Ken Bollweg and Mike Capell to work with Alexander Grechko to resolve file transfer problems.

11/27/06 - J. Keiffenheim reports that space is available for hanging plumbing, and KSC can design, manufacture hanging hardware. Still have concerns regarding fill port plumbing suspension, so will keep open.

10/16/06 - Date rolled to 11/15 after Cryo GSE meeting at KSC.

6/26/2006 - Date rolled to October 15th after Magnet Processing meeting at KSC.

5/15/2006 - Further discussion on handling of CGSE after PLBD close prelaunch is required.

3/24/2006 - Trent Martin to forward all data provided by KSC to Art Nelson for inclusion in ground safety package.

2/14/2006 - Alexander Gretchko waiting on information from KSC - Trent Martin to coordinate.

Open Action Items Report

Open Item Number: 07-008

RID Open Date: 6/14/2007

Title: *DDRS Rapid Safing*

Intiator(s): *Chris Tutt*

Description: *DDRS must meet rapid safing requirements described in MA2-96-190.*

Action Item Information

Actionee(s): *Tim Urban/ESCG*

Action Due Date: 9/10/2007

Action: *Gain concurrence from NASA that DDRS meets rapid safing requirements.*

Action Status: 2/29/2008 - Closure rationale memo provided by Peter Dennett/Padsoft. Memo approved by Project Office and ready for release to Shuttle.
2/22/2008 - Phyllis Grounds assigned as new Shuttle MIM - will be working this issue along with other MIP-related items.
11/30/2007 - Question refered to Frank Moreno/MO to check with Shuttle safety.
9/28/2007 - Joel Sills/MO researching requirements and trying to identify appropriate points of contact within SSP.
6/15/2007 - Tim Urban to investigate who approves IVA rapid safing and find out what they want to see to close issue.

Open Action Items Report

Open Item Number: 07-025

RID Open Date: 11/5/2007

Title: Vacuum Pump Monitoring

Intiator(s): Jack Keifenheim

Description: Determine ground and on-board vacuum pump monitoring requirements at pad.

Action Item Information

Actionee(s): Trent Martin/JSC, Mike Capell/MIT

Action Due Date: 6/15/2008

Action: Determine what information needs to be monitored on the vacuum pumps during all ground processing scenarios. In particular, determine what monitoring is required during S0024 and the pad clears, and whether 24/7 monitoring is required.

Action Status: 12/16/2007 - Issues to be investigate during CGSE shakedown at CERN. Action date rolled to delivery + 3 weeks (~mid-June).

Open Action Items Report

Open Item Number: 07-033

RID Open Date: 11/5/2007

Title: OPF Testing

Intiator(s): Jack Keifenheim

Description: Provide details on proposed OPF testing.

Action Item Information

Actionee(s): Tim Urban/ESCG

Action Due Date: 1/15/2008

Action: Provide details on facility requirements for all proposed OPF tests.

Action Status: 5/1/2008 - Proposal sent out for review.
12/16/2007 - Date set to 15 Jan.

Open Action Items Report

Open Item Number: 07-036

RID Open Date: 1/11/2008

Title: Cryosystem Response to Power Flickers

Initiator(s): Chris Tutt

Description: Effects of possible power losses at KSC need to be considered in the cryosystem safety analyses.

Action Item Information

Actionee(s): Tim Urban/ESCG

Action Due Date: 6/1/2008

Action: Need details on the default state of the AMS-02 and an estimate of how long it would take to return to the standard ground operational condition.

Action Status: 1/11/2008 - Initial review of default state is being rolled into safety analysis. Initial review of time to return to nominal ops indicates this should not be a concern as long as commanding is still available. More detailed review will be done with appropriate collaboration personnel at a later date.

Open Action Items Report

Open Item Number: 07-037

RID Open Date: 3/7/2008

Title: Thermal Model for Specularity Analysis

Initiator(s): Eric Schaefer

Description: ISS program requires AMS-02 thermal model including specularity data in order to assess effects on ISS hardware.

Action Item Information

Actionee(s): Craig Clark/ESCG

Action Due Date: 4/7/2008

Action: Provide thermal model to ISS program

Action Status: 5/1/2008 - CGS schedule shows model delivery on 20 May.

Open Action Items Report

Open Item Number: 07-038

RID Open Date: 3/7/2008

Title: S-Band CHD Support

Intiator(s): Chris Tutt

Description: Approval of AMS use of the S-Band for CHD comes from the ICATT

Action Item Information

Actionee(s): Trent Martin/EA3, Tim Urban/ESCG

Action Due Date: 4/7/2008

Action: Meet with Susan Creasy and the ASCB to determine what information they need to approve this request.

Action Status: 4/24/2008 - Preliminary meeting with ASCB showed that request is possible. ASCB to provide more detail on current Ku-band/S-band coverage limits. Project to better define what information is being requested to help ASCB team prepare the justification for the request.

Open Action Items Report

Open Item Number: 07-039

RID Open Date: 4/3/2008

Title: Thermal Blanket Fixation Requirement

Intiator(s): Leland Hill

Description: Resolve conflict between thermal blanket safety requirements and GFE-provided hardware.

Action Item Information

Actionee(s): Leland Hill

Action Due Date: 4/25/2008

Action: Determine whether PVGF was allowed to fly previously with Velcro-only blankets or whether ESP-3 modified the MDA-provided blankets to add positive attachment.

Action Status: 5/15/2008 - Confirmation received that PVGF and other hardware have previously been allowed to fly using velcro as the primary means of attachment. Safety rationale remains unclear. PSRP to respond formally.

4/23/2008 - Formal request for clarification sent to the PSRP.

4/1/2008 - Steve Kunkel confirmed that all blankets must have positive attachment features despite lack of written requirement.

Open Action Items Report

Open Item Number: 07-040

RID Open Date:

Title: CAB LHP MLI

Intiator(s): Leland Hill

Description: Confirm that CAB Loop Heat Pipe will have appropriate MLI installed.

Action Item Information

Actionee(s): Craig Clark

Action Due Date: 4/25/2008

Action: Determine whether MLI originally required to cover the exposed area of the CAB Loop Heat Pipe is still required. If so, determine an appropriate inspection point for safety closure.

Action Status:

Open Action Items Report

Open Item Number: 07-041

RID Open Date:

Title: TRD Gas Supply ADP

Intiator(s): Leland Hill

Description: Safety documentation needs to be generated to close all safety inspections relative to the TRD Gas Supply

Action Item Information

Actionee(s): Chris Tutt

Action Due Date: 4/25/2008

Action: Work with Thorsten Siedenberg to get documentation of TRD Gas Supply heater installation and inspection, COPV acceptance data, and missing stress report items.

Action Status:

Open Action Items Report

Open Item Number: 07-043

RID Open Date: 4/3/2008

Title: UPS Battery Case Inspection

Initiator(s): Leland Hill

Description: Provide documentation showing that the UPS casing is appropriately coated to prevent the cells from shorting to the case.

Action Item Information

Actionee(s): Tim Urban/ESCG

Action Due Date: 4/25/2008

Action: Work with CSIST or Yardney as appropriate to determine the simplest way of demonstrating compliance.

Action Status:

Open Action Items Report

Open Item Number: 07-044

RID Open Date: 4/3/2008

Title: PMT Inspections

Intiator(s): Leland Hill

Description: PMTs need appropriate safety documentation to justify multiple closures.

Action Item Information

Actionee(s): Chris Tutt

Action Due Date: 4/25/2008

Action: Work with Frank Cadoux, Stefan Schael, and Giulano Laurenti to determine what acceptance documentation exists for the PMTs in each of the various detector groups.

Action Status:

Open Action Items Report

Open Item Number: 07-046

RID Open Date: 5/1/2008

Title: EVA Connector Safety Closures

Initiator(s): Chris Tutt

Description: EVA Connectors on AMS-02 need to be reviewed for compliance with safety requirements.

Action Item Information

Actionee(s): Tim Urban/ESCG

Action Due Date:

Action: All EVA connectors on AMS-02 need to be reviewed for compliance with SSQ 21635 and safety verifications listed in Flight Hazard Report #12.

Action Status:

Open Action Items Report

Open Item Number: 07-047

RID Open Date:

Title: Bent Pin Analysis

Initiator(s): Chris Tutt

Description: All EVA connectors are required to show that a bent pin cannot short a power connection to its return.

Action Item Information

Actionee(s): Tim Urban/ESCG

Action Due Date:

Action: Bent pin analysis for all EVA connectors needs to be completed and documented.

Action Status:

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-06

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): Marco Molina

Action Due Date: 12/1/2007

Action: Re-evaluate thermal optical properties on the top of the PDS as there are no longer heaters located there (breakdown of MLI vs. white paint). QM & FM different ?

Action Status: 3/26/2007 - Work has restarted - ECD on this question 4/15.
2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
7/7/06 - Investigate contract status at July TIM.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
8/2/2005 - Awaiting thermal analysis of revised worst hot case.

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-08

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): S. Alia

Action Due Date: 12/1/2007

Action: Add 0.03 μ F per 3.2.2.2.2.A of SSP 57003, and add verification by design inspection or test.

Action Status: 3/26/2007 - Updated reports to be released at PDS MRR in December.
2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
11/7/2005 - All further PDS activities on hold until 6 Feb 2006.
8/22/2005 - CGS proposes release of updated document by 9/19.
8/15/2005 - Tim Urban to contact Sergio Alia and resolve remaining concerns. Closure expected by 9/5.

Open Action Items Report

Open Item Number: AMS_02-PDS_CDR-09-2

RID Open Date: 4/18/2005

Title:

Initiator(s): Tim Urban

Description:

Action Item Information

Actionee(s): S. Alia

Action Due Date: 12/1/2007

Action: Update document for maximum operating temperature of 51°C (Section 3.2, requirement ID PDS-ENV-3).

Action Status: 2/5/2007 - ASI budget approved; some movement on contract. Dates rolled to 3/5/07.
8/28/06 - Contract still in work. Work-around by using EM for initial testing. Roll date to 10/5.
5/08/2006 - Contract to be in place by June; roll date to 7/1/06
4/10/06 - On-hold pending resolution of ETH/CGS contract.
11/7/2005 - All further PDS activities on hold until 6 Feb 2006.
8/22/2005 - CGS proposes release of updated document by 9/19.
8/2/2005 - MOT should be changed to match updated worst case hot temperature.